

Title (en)

OPHTHALMIC LENS GENERATING APPARATUS HAVING VIBRATION DAMPENING STRUCTURE

Title (de)

OPHTALMISCHE LINSE ERZEUGUNGSVORRICHTUNG MIT SCHWINGUNGSDÄMPFUNGSSANORDNUNG

Title (fr)

DISPOSITIF DE PRODUCTION DE VERRES OPTIQUES AVEC STRUCTURE AMORTISSANT LES VIBRATIONS

Publication

EP 0921903 B1 20020807 (EN)

Application

EP 98923947 A 19980527

Priority

- CA 9800515 W 19980527
- US 86888497 A 19970604

Abstract (en)

[origin: WO9855261A1] An ophthalmic lens generating apparatus having a tool spindle comprising a motor, a lens surfacing tool and a coupling mounted between the motor and the lens surfacing tool for retaining the lens surfacing tool to the arbor of the motor. The apparatus of the present invention also comprises a first actuated table supporting the tool spindle in a movable manner along the longitudinal axis of the apparatus. A massive base is mounted beneath the first actuated table for supporting the table and for dampening radial vibrations of the tool spindle. The apparatus further comprises a lens holder for holding an ophthalmic lens in a plane substantially perpendicular to the longitudinal axis of the apparatus. A massive upright block is mounted on one end of the massive base behind the structural support supporting the lens holder, for dampening axial vibrations of the tool spindle and of the lens holder. The coupling of the tool spindle is a kinematic coupling having first and second disks having each substantial mass and radius of gyration. Thus, when the tool spindle rotates, both disks increase the nominal moment of inertia of the spindle and dampen the torsional vibrations of the spindle.

IPC 1-7

B24B 13/00; B24B 41/00; B24B 41/04

IPC 8 full level

B23C 3/16 (2006.01); **B23B 31/26** (2006.01); **B23C 5/00** (2006.01); **B23Q 11/00** (2006.01); **B24B 13/00** (2006.01); **B24B 13/01** (2006.01); **B24B 41/00** (2006.01); **B24B 41/04** (2006.01)

CPC (source: EP KR US)

B23B 5/00 (2013.01 - KR); **B23B 31/263** (2013.01 - EP US); **B23C 5/00** (2013.01 - EP US); **B24B 13/00** (2013.01 - EP US);
B24B 13/01 (2013.01 - EP US); **B24B 41/007** (2013.01 - EP US); **B24B 41/04** (2013.01 - EP US); **Y10T 82/2566** (2015.01 - EP US);
Y10T 408/76 (2015.01 - EP US); **Y10T 408/91** (2015.01 - EP US); **Y10T 409/304312** (2015.01 - EP US); **Y10T 409/309576** (2015.01 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9855261 A1 19981210; AT E221815 T1 20020815; AU 748132 B2 20020530; AU 7632898 A 19981221; CA 2261651 A1 19981210;
CN 1080163 C 20020306; CN 1228046 A 19990908; DE 69807032 D1 20020912; DE 69807032 T2 20030508; EP 0921903 A1 19990616;
EP 0921903 B1 20020807; ES 2182312 T3 20030301; JP 2001510403 A 20010731; KR 20000068030 A 20001125; PT 921903 E 20021231;
US 5919013 A 19990706

DOCDB simple family (application)

CA 9800515 W 19980527; AT 98923947 T 19980527; AU 7632898 A 19980527; CA 2261651 A 19980527; CN 98800767 A 19980527;
DE 69807032 T 19980527; EP 98923947 A 19980527; ES 98923947 T 19980527; JP 50117299 A 19980527; KR 19997000854 A 19990201;
PT 98923947 T 19980527; US 86888497 A 19970604